Attorney Docket Number: 037003-0277113 PATENT APPLICATION
Client Reference: 1999-30-0310A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Gary R. BRASLAWSKY et al. Group Art Unit: 1642

Application Serial No. 09/238,741 Examiner: L. Helms

Filed: January 28, 1999

Title: PRODUCTION OF TETRAVALENT ANTIBODIES

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

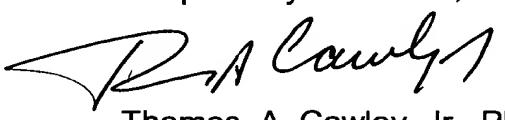
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Copies of the references are included. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed after the first action and before the mailing date of a final office action, notice of allowance, or other action that closes prosecution of the present application, and is accompanied by the fee set forth in 37 C.F.R. §1.17(p).

Respectfully submitted,



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Date: July 7, 2004

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PTO/SB/17 (10-03)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 180.00

Complete if Known	
Application Number	09/238,741
Filing Date	January 28, 1999
First Named Inventor	GARY R BRASLAWSKY
Examiner Name	Larry Helms
Art Unit	1642
Attorney Docket No.	037003-0277113

METHOD OF PAYMENT *(check all that apply)*

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number: 033975

Deposit Account Name: PILLSBURY WINTHROP LLP

The Director is authorized to: *(check all that apply)*

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) ($) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims		Fee from below	Fee Paid
Total Claims		-20** =		x =
Independent Claims		- 3** =		x =
Multiple Dependent				=

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for *ex parte* reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	180.00
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 180.00

SUBMITTED BY

Name (Print/Type)	Thomas A. Cawley, Jr. Ph.D.	Registration No. (Attorney/Agent)	40944	Telephone	(703) 905-2144
Signature				Date	July 7, 2004

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FORM PTO-1449 (modified) (PW FORM PAT-1449)	Atty. Ref. No. 037003-0277113	Client Ref. 1999-30-0310A
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Applicant: BRASLAWSKY et al.	
	Appln. No.: 09/238,741	
	Filing Date: January 28, 1999	
Date: July 7, 2004 Page 1 of 2	Examiner: L. Helms	Group Art Unit: 1642

U.S. PATENT DOCUMENTS

Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)
	AR	5,830,698		Reff
	BR			

FOREIGN PATENT DOCUMENTS

		Document Number	Date MM/YYYY	Country	Inventor Name		English Abstract		Translation Readily Available	
							Enclosed	No	Enclosed	No
	CR	WO 91 19515	12/1991	PCT	Shopes					
	DR									

OTHER (Including in this order Author, Title, Periodical Name, Date, Volume, and Pertinent Pages)

	ER	Brennan M, et al., "Preparation of bispecific antibodies by chemical recombination of monoclonal immunoglobulin G1 fragments," *Science*, 1985, 229: 81-3.
	FR	Chaouchi N, et al., "B cell antigen receptor-mediated apoptosis. Importance of accessory molecules CD19 and CD22, and of surface IgM cross-linking," *J Immunol*, 1995, 154: 3096-104.
	GR	Clark EA, et al., "Role of the Bp35 cell surface polypeptide in human B-cell activation," *Proc Natl Acad Sci U S A*, 1985, 82: 1766-70.
	HR	Clark EA, et al., "Structure, function, and genetics of human B cell-associated surface molecules," *Adv Cancer Res*, 1989, 52: 81-149.
	IR	FitzGerald K, et al., "Improved tumour targeting by disulphide stabilized diabodies expressed in Pichia pastoris," *Protein Eng*, 1997, 10: 1221-5.
	JR	Funakoshi S, et al., "Differential in vitro and in vivo antitumor effects mediated by anti-CD40 and anti-CD20 monoclonal antibodies against human B-cell lymphomas," *J Immunother Emphasis Tumor Immunol*, 1996, 19: 93-101.
	KR	Holder M, et al., "Engagement of CD20 suppresses apoptosis in germinal center B cells," *Eur. J. Immunol.*, 1995, 25: 3160-64.
	LR	Hooijberg E, et al., "Enhanced antitumor effects of CD20 over CD19 monoclonal antibodies in a nude mouse xenograft model," *Cancer Res.*, 1995, 55: 840-6.
	MR	Jiang Liying et al., "Enhanced effector functions of dimeric forms of IDEC-C2B8 (rituximab)," *Blood*, 1999, 94(10):86a (Astract No. 376).
	NR	Maloney DG, et al., "Phase I clinical trial using escalating single-dose infusion of chimeric anti-CD20 monoclonal antibody (IDEC-C2B8) in patients with recurrent B-cell lymphoma," *Blood*, 1994, 84: 2457-66.
	OR	Maloney et al., "IDEC-C2B8: results of a phase I multiple-dose trial in patients with relapsed non-Hodgkin's lymphoma," *J Clin Oncol*, 1997, 15(10):3266.
	PR	McLaughlin et al., "IDEC-C2B (rituximab): clinical activity in clinically chemoresistant (CCRD) low-grade of follicular lymphoma (LG/F NHL) and in patients (pts) relapsing after anthracycline therapy (ANTRA-RX) of ABMT," *Proc. Am. Soc. Clin. Oncol.*, 1997, 16: 16a (Abstract 55)
	QR	McLaughlin et al., "Rituximab Chimeric Anti-CD20 Monoclonal Antibody Therapy for Relapsed Indolent Lymphoma: Half of Patients Respond to a Four-Dose Treatment Program," J Clin Oncol., 1998, 16(8):2825-33.
	RR	Merchant AM et al., "An efficient route to human bispecific IgG," *Nature Biotechnology*, 1998, 16(7):1087 (Abstract).
	SR	Newell MK, et al., "Ligation of major histocompatibility complex class II molecules mediates apoptotic cell death in resting B lymphocytes," *Proc Natl Acad Sci U S A*, 1993, 90: 10459-63.

	TR	Press OW, et al., "Monoclonal antibody 1F5 (anti-CD20) serotherapy of human B cell lymphomas," *Blood*, 1987, 69: 584-91.
	UR	Siegall CB, et al., "Cytotoxicity of chimeric (human-murine) monoclonal antibody BR96 IgG, F(ab')2, and Fab' conjugated to Pseudomonas exotoxin," *Bioconjug Chem*, 1992, 3: 302-7.
	VR	Tedder TF, et al., "Antibodies reactive with the B1 molecule inhibit cell cycle progression but not activation of human B lymphocytes," *Eur J Immunol*, 1986, 16: 881-7.
	WR	Tedder TF, et al., "CD20: a regulator of cell-cycle progression of B lymphocytes," *Immunol Today*, 1994, 15: 450-4.
	XR	Valentine MA, et al., "Rescue from anti-IgM-induced programmed cell death by the B cell surface proteins CD20 and CD40," *Eur J Immunol*, 1992, 22: 3141-8.
	YR	Varadarajan et al., "Conjugation of Phenyl Isothiocyanate Derivatives of Carborane to Antitumor Antibody and in Vivo Localization of Conjugates in Nude Mice," *Bioconj. Chem.*, 1991, 2: 102-110.
	ZR	Willner D, et al., "(6-Maleimidocaproyl)hydrazone of doxorubicin--a new derivative for the preparation of immunoconjugates of doxorubicin," *Bioconjug Chem*, 1993, 4: 521-7.
	AAR	Wolff EA, et al., "Monoclonal antibody homodimers: enhanced antitumor activity in nude mice," *Cancer Res*, 1993, 53: 2560-5.

Examiner	Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.